

**FAX COVER SHEET**

John Piskorski
Law Office
Shipley Company
455 Forest Street
Marlborough, Massachusetts 01752-4634

Telephone: (508) 229-7662
Fax: (508) 787-4730

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TO: Examiner Edna Wong	Fax Number: 703-872-9031
CC:	Fax Number:

NOTES: Proposed Amendments for Patent Application Serial No. 09/910,448

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3. (Amended) The process of claim 1 or 2 wherein the substrate is first treated with ~~a~~the bismuth material and then treated with ~~a~~the sulfur material.
4. (Amended) The process of ~~any one of claims 1 through 3~~claim 1 or 2 wherein the ~~substrate is treated with~~sulfur material is a sulfide reagent.
6. (Amended) The process of ~~any one of claims 1 through 5~~claim 5 wherein the sulfide reagent is a sulfur salt.
7. (Amended) The process of ~~any one of claims 1 through 6~~claim 1 wherein the substrate is treated with a solution of the bismuth material.
9. (Amended) The process of ~~any one of claims 1 through 8~~claim 1 wherein the substrate is treated with a solution of the sulfur material.
11. (Amended) The process of ~~any one of claims 1 through 10~~claim 1 wherein the substrate is ~~electrolytically~~metal plated with nickel.
12. (Amended) The process of ~~any one of claims 1 through 10~~claim 1 wherein the substrate is ~~electrolytically~~metal plated with copper.
13. (Amended) The process of ~~any one of claims 1 through 10~~claim 1 wherein the substrate is ~~electrolytically~~metal plated with gold.
14. (Amended) The process of ~~any one of claims 1 through 13~~claim 1 wherein the substrate is treated with an etchant prior to treatment with the bismuth material.
15. (Amended) The process of ~~any one of claims 1 through 14~~claim 1 wherein the substrate surface comprises a dielectric material.

16. (Amended) The process of ~~any one of claims 1 through 15~~ claim 15 wherein the substrate surface comprises an epoxy resin, ABS, or a polyetherimide.

17. (Amended) The process of ~~any one of claims 1 through 16~~ claim 1 wherein the substrate is an electronic packaging substrate.

18. (Amended) The process of ~~any one of claims 1 through 16~~ claim 1 wherein the metal plate provides a decorative or protective function.

19. (Amended) The process of ~~any one of claims 1 through 18~~ claim 3 wherein the substrate is treated with water after treatment with the bismuth material and before treatment with the ~~sulfide~~ sulfur material.

Please amend the claims as follows:

1. (Amended) A process for metal deposition, comprising treating a ~~substrate dielectric~~ with a bismuth material and a sulfur material and metal plating the substrate.
2. (Amended) The process of claim 1 wherein the ~~substrate dielectric~~ is treated with trivalent bismuth.
3. (Amended) The process of claim 1 or 2 wherein the ~~substrate dielectric~~ is first treated with ~~a the~~ bismuth material and then treated with ~~a the~~ sulfur material.
4. (Amended) The process of ~~any one of claims 1 through 3~~ claim 1 or 2 wherein the ~~substrate is treated with~~ sulfur material is a sulfide reagent.
6. (Amended) The process of ~~any one of claims 1 through 5~~ claim 5 wherein the sulfide reagent is a sulfur salt.
7. (Amended) The process of ~~any one of claims 1 through 6~~ claim 1 wherein the ~~dielectric substrate~~ is treated with a solution of the bismuth material.
9. (Amended) The process of ~~any one of claims 1 through 8~~ claim 1 wherein the ~~dielectric substrate~~ is treated with a solution of the sulfur material.
11. (Amended) The process of ~~any one of claims 1 through 10~~ claim 1 wherein the ~~dielectric substrate~~ is electrolytically metal plated with nickel.
12. (Amended) The process of ~~any one of claims 1 through 10~~ claim 1 wherein the ~~dielectric substrate~~ is electrolytically metal plated with copper.
13. (Amended) The process of ~~any one of claims 1 through 10~~ claim 1 wherein the ~~dielectric substrate~~ is electrolytically metal plated with gold.
14. (Amended) The process of ~~any one of claims 1 through 13~~ claim 1 wherein the ~~dielectric substrate~~ is treated with an etchant prior to treatment with the bismuth material.
16. (Amended) The process of ~~any one of claims 1 through 15~~ claim 1 wherein the ~~dielectric substrate surface~~ comprises an epoxy resin, ABS, or a polyetherimide.
17. (Amended) The process of ~~any one of claims 1 through 16~~ claim 1 wherein the ~~dielectric substrate~~ is an electronic packaging dielectricsubstrate.
18. (Amended) The process of ~~any one of claims 1 through 16~~ claim 1 wherein the ~~metal plate~~ provides a decorative or protective function.

APPENDIX B

Please amend the claims as follows:

1. A process for metal deposition, comprising treating a dielectric with a bismuth material and a sulfur material and metal plating the substrate.
2. The process of claim 1 wherein the dielectric is treated with trivalent bismuth.
3. The process of claim 1 or 2 wherein the dielectric is first treated with the bismuth material and then treated with the sulfur material.
4. The process of claim 1 or 2 wherein the sulfur material is a sulfide reagent.
6. The process of claim 5 wherein the sulfide reagent is a sulfur salt.
7. The process of claim 1 wherein the dielectric is treated with a solution of the bismuth material.
9. The process of claim 1 wherein the dielectric is treated with a solution of the sulfur material.
11. The process of claim 1 wherein the dielectric is metal plated with nickel.
12. The process of claim 1 wherein the dielectric is metal plated with copper.
13. The process of claim 1 wherein the dielectric is metal plated with gold.
14. The process of claim 1 wherein the dielectric is treated with an etchant prior to treatment with the bismuth material.
16. The process of claim 1 wherein the dielectric comprises an epoxy resin, ABS, or a polyetherimide.
17. The process of claim 1 wherein the dielectric is an electronic packaging dielectric.
18. The process of claim 1 wherein metal provides a decorative or protective function.
19. The process of claim 3 wherein the dielectric is treated with water after treatment with the bismuth material and before treatment with the sulfur material.